

Focus: Multiplying up to 4-digit numbers by 2-digit numbers

1) Mr X earns £2,375 a month. How much does he earn in one year?

$$2375 \times 12 = 2375 \times 2 + 2375 \times 10 = 4750 + 23750 = \text{£}28,500$$

2) a) Wembley football pitch is 105m long and 69m wide. What is its area?

$$105 \times 69 = 105 \times 9 + 105 \times 60 = 945 + 6,300 = 7,245\text{m}^2$$

b) Stamford Bridge football pitch is 103m long and 67m wide.

$$103 \times 67 = 103 \times 7 + 103 \times 60 = 721 + 6,180 = 6,901\text{m}^2$$

How many square metres is Wembley bigger than Stamford Bridge? (It's not 4m^2)

$$7245 - 6901 = 344 \text{ m}^2$$

3) A bakery factory can make 1728 cupcakes every two minutes.

Each cupcake needs 42g flour. How many kg of flour do they need every hour?

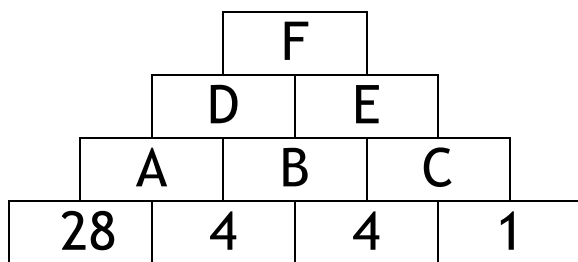
$$1728 \times 42 = 1728 \times 2 + 1728 \times 40 = 3456 + 69120 = 72,576\text{g}$$

$$72576 \times 30 = 2177280\text{g} = 2177.28\text{kg}$$

4) The number in each box is the product of the two numbers below it.

What number goes in each box with a letter?

Write down all your calculations and show your working out.



$$A = 112, B = 16, C = 4, D = 1792, E = 64, F = (7168 + 107520) = 114,688$$

5) Work out what the missing digits are in the calculations and complete them.

(Thinking about the ones digits will help you)

a)

$$\begin{array}{r} \square \square \\ \times \square 7 \\ \hline 3 \square 4 \\ \square 0 8 \square \\ \hline \square \square \square \square \end{array}$$

b)

$$\begin{array}{r} \square 2 \square \\ \times \square 3 \\ \hline \square 4 \square 8 \\ \square \square \square 0 \square \\ \hline \square \square \square \square \square \end{array}$$

c)

$$\begin{array}{r} 4 \square 6 \\ \times \square \square \\ \hline \square \square 8 8 \\ \square \square \square 0 \square \\ \hline \square \square \square \square \square \end{array}$$

a) $52 \times 47 = 364 + 2,080 = 2,444$

b) $826 \times 53 = 2,478 + 41,300 = 43,778$

c) $436 \times 58 = 3,488 + 21,800 = 25,288$